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microcannula system further includes an inner plug mounted on the modified microcannula system.

2. A microcatheter system comprising:

a flexible cannula for insertion into a retinal vein lumen, whereby a solution is infused into the retinal vein lumen through the flexible cannula and the flexible cannula remains within the retinal vein lumen during the infusion without an external holding for at least a period of time required for a bolus injection; and a second cannula wherein the microcatheter system comprises a modified microcannula system in which the flexible cannula and second cannula are mounted, and wherein the microcannula system further includes an inner plug mounted on the modified microcannula system.

3. A microcatheter system comprising:

a flexible cannula for insertion into a retinal vein lumen, whereby a solution is infused into the retinal vein lumen through the flexible cannula and the flexible cannula remains within the retinal vein lumen during the infusion without an external holding device; and a second cannula, wherein the microcatheter system comprises a modified microcannula system in which the flexible cannula and second cannula are mounted, and wherein the microcannula system further includes an inner plug mounted on the modified microcannula system.

- 21. The microcatheter system of any one of claims 1 through 3, wherein the inner plug is fabricated of silicone.
- 22. The microcatheter system of any one of claims 1 through 3, wherein the inner plug has an aperture through which the second cannula and flexible cannula are inserted.
- 23. The microcatheter system of any one of claims 1 through 3, wherein the inner plug forms a fluid-tight seal about the second cannula.

